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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/039,103	01/04/2002	Kenneth L. Smith	48924US031	1532

7590 06/14/2002

Office of Intellectual Property Counsel
3M Innovative Properties Company
PO Box 33427
St. Paul, MN 55133-3427

EXAMINER

PHAN, JAMES

ART UNIT	PAPER NUMBER
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2872

DATE MAILED: 06/14/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.
10/039,103

Applicant(s)
Smith et al

Examiner
James Phan

Art Unit
2872



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE three MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on _____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-39 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-39 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 2 6) ☐ Other:

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DETAILED ACTION

Claim Rejections - 35 USC § 112

1. Claims 26-39 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 26 recites the limitation "the body layer" in lines 3-4. There is insufficient antecedent basis for this limitation in the claim. Should "layer" in line 3 be changed to --body layer--?

Claim 26 recites the limitation "the second major surface of the body layer" in lines 6-7. There is insufficient antecedent basis for this limitation in the claim. Should "layer" before "such" in line 7 be changed to --portion--.

Claim 29 recites the limitation "land layer" in the phrase "the cube-corner elements and land layer comprise" in lines 1-2. There is insufficient antecedent basis for this limitation in the claim.

Claims 27-28 and 30-39 are also rejected in that they are dependent on the indefinite claim and thus inherit the deficiency above.

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Double Patenting

2. The non-statutory double patenting rejection, whether of the obviousness-type or non-obviousness-type, is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent. *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); and *In re Goodman*, 29 USPQ2d 2010 (Fed. Cir. 1993).

A timely filed terminal disclaimer in compliance with 37 CAR 1.321(b) and © may be used to overcome an actual or provisional rejection based on a non-statutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CAR 1.78(d).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CAR 3.73(b).

3. Claims 1-39 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-20 and 22 of U.S. Patent No. 5,450,235. Although the conflicting claims are not identical, they are not patentably distinct from each other because (1) the body portion in the patent claims inherently has a first and a second major surfaces and (2) the retroreflective article specified in the the patent claims inherently meets the recitation "the

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retroreflective sheeting does not exhibit a substantial loss of retroreflectivity when flexed” specified by claim 1 of the instant application since the article defined by the patent claims has the same physical structure as the sheeting defined by the claims of the instant application.

4. Claims 1-39 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-29 of U.S. Patent No. 5,988,820. Although the conflicting claims are not identical, they are not patentably distinct from each other because the retroreflective sheeting specified in claims 1-39 of the present application can be made by the methods specified in patent claims 1-29.

5. Claims 1-39 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-38 of U.S. Patent No. 6,350,035. Although the conflicting claims are not identical, they are not patentably distinct from each other because (1) claims 1-25 of the present application are broader than and thus dominate the patent claims 1-24, and (2) the term “body layer” in claim 26 of the present application does not distinguish from the term “body portion” in the patent claim 25 and thus, claims 26-39 of the present application are not patentably distinct from the patent claims 25-38.

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Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1, 8-10, 13-17, 19, and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Phillips '586 or '222 in view of the Plastics Digest.

Phillips discloses an elastomeric retroreflective sheeting 10 and a method of making the same. The method comprises the steps of forming a body portion including a body layer 12 of polyvinyl chloride and securing cube corner elements 20 of a polymer that has a high modulus of elasticity to the body layer. Phillips does not disclose that the body layer has an elastic modulus of less than 7×10^8 Pascal. However, it is known that polyvinyl chloride has a wide range of elastic modulus, i.e. from 2.34×10^6 Pascal to 8.86×10^9 Pascal (see Plastics Digest, pages 1-298 to 1-300). Thus, it appears that Phillips use the polyvinyl chloride having any elastic modulus, i.e. either greater than 7×10^8 Pascal or less than 7×10^8 Pascal. Hence, it would have been obvious to one of ordinary skill in the art to use the polyvinyl chloride having an elastic modulus of less than 7×10^8 Pascal, less than 5×10^8 Pascal, or less than 3×10^8 Pascal as a matter of choice for the body layer as long as the cube corner elements has a greater elastic modulus than that of the body layer such that when the elastomeric retroreflective sheeting 10 is significantly stretched, the cube corner elements are not significantly distorted. Note that the array of cube-corner elements

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disclosed in Phillips is non-extensible, thus, the polymeric material use for the array of cube-corner elements must have an elastic modulus greater than the body layer (elastomeric film 12).

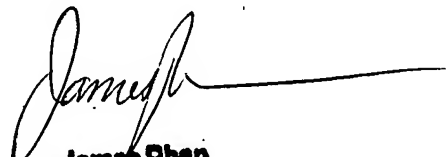
Conclusion

8. The listed references cited in the I.D.S. filed 2/25/02 have been considered.
9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to James Phan whose telephone number is (703) 308-4810. The fax phone number for this Group is (703) 308-7722.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0956.

Phan, J.

June 10, 2002


James Phan
Primary Examiner